

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-009863**Date Inspected:** 01-Oct-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower Fabrication**Summary of Items Observed:**

CWI Inspectors: Mr. Fu Jun, Mr.Li Ming

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

**TOWER BAY 10**

This QA Inspector observed ZPMC welder Mr. Lu Houjin, stencil 040333 is using welding procedure WPS-485-SMAW-2G(2F)-Repair-1 to make a shielded metal arc repair weld on south tower lift 3 weld SSTL3-11/K-090. This QA Inspector observed ZPMC CWI Mr. Fu Jun monitoring this welding. This QA Inspector observed a welding current of approximately 165 amps and ZPMC appears to have used electric heating elements preheat the base material where the weld was being deposited. This QA Inspector observed the shielded metal arc welding electrodes are being stored in an electrically heated electrode storage container which is warm to the touch and Mr. Lu Houjin is certified to make this weld. Mr. Fu Jun showed this QA Inspector a weld repair document and he indicated that the reason for the repair is to eliminate the ultrasonic rejections and that ZPMC will assign a number to the weld repair document tomorrow. Items observed by the QA Inspector appear to comply with project specifications.

This QA Inspector observed ZPMC welder Mr. Yu Chaoye, stencil 053869 is using flux cored welding procedure

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## WELDING INSPECTION REPORT

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WPS-345-FCAW-1G(1F)-Repair to make repairs to south tower lift 4 weld SSTL4-1L/L-3A. This QA Inspector observed a welding current of 310 amps, 30.0 volts and base material appears to have been preheated using an electric heating element. This QA Inspector observed that Ms. Dong Yumei is certified to make this weld and that ZPMC Quality Control Inspector is Mr. Gao Zhichun monitoring this welding. Items observed by this QA Inspector appear to be progressing in compliance with project specifications.

This QA Inspector observed ZPMC has two welders assigned to weld temporary lifting attachment plates to north lift 4 skin plate "C". This QA Inspector observed ZPMC Quality Control Certified Welding Inspector Mr. Li Ming monitoring the welding parameters and that the base material has been preheated and maintained to a minimum of 110°C prior to and during the completion of the welding. Items observed by this QA Inspector appear to be progressing in compliance with project specifications.

### Summary of Conversations:

See above.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod phone: 134-8257-0045 , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Dawson,Paul	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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